



AR5000A & AR5000A+3

2,000 memory channels, 40 search banks, 10 VFOs, 10 kHz - 3 GHz

The AR5000A provides amazing sensitivity and strong signal handling across an unprecedented wide frequency coverage with all mode receive tunable down to 1Hz steps... all this in a compact cabinet weighing just 3.5kg. No wonder this receiver has been adopted as the definitive receiver for professional operators, top-end hobbyists, government departments and armed forces throughout the world. The short wave performance is so good that separate receivers need not be considered.

Whether sitting on the desktop monitoring short wave transmissions or connected to aerial farms for wide band VHF-UHF monitoring (via the optional AS5000 4-way aerial switch with automatic bandplan switching), operators have been astonished how the seemingly impossible has been achieved... unparalleled high performance, an amazingly flexible operating system, high build quality featuring a metal cabinet - yet still remaining very compact.

Multiple units have been interconnected at airports for communication monitoring, others have been ported via RS232 into dial-up or LAN monitoring applications. The receiver has even been combined with the optional spectrum display unit and located in distant concrete bunkers controlled via a laptop computer and dial-up connection. There is little competition for comparison, 'the rest of the pack' are significantly larger, heavier or many times more expensive!



CyberScan

☆☆☆☆ AR5000+3 awarded four stars by both the authoritative Passport To World Band Radio and World Radio & TV Handbook

True base receivers are few and far between, some have simply evolved from the hand held equivalents with little tangible improvement in performance or facilities over their smaller counterparts (or use switched wide band converters) - *the AR5000A is not like this!* AOR have been synonymous with pioneering receiver design from many years and this tradition continues with the AR5000A. A great advancement in wide band front end design has been made, partly due to the introduction of **automatic electronic preselection** between 530kHz - 999.999999MHz with low pass, band pass and high pass filters for other bands. The preselection may be "manually tracked" when monitoring spot frequencies to help reduce any potential effects of interference caused by nearby monster transmitters, this results in excellent strong signal handling yet maintains high sensitivity.

A TCXO forms the building block which is fitted as standard to ensure a very high degree of stability, provision is made to feed the AR5000A from an external 10 MHz reference signal should one be available (commercial organisations etc). A **Numeric Controlled Oscillator (NCO)** provides smooth tuning with **steps right down to 1Hz**. The receive circuitry is a triple conversion superheterodyne with I.F.s of 822.0/822.4MHz, 10.7MHz & 455kHz. Multiple switchable I.F. bandwidths are available in both the 10.7MHz and 455kHz I.F. stages: 3kHz, 6kHz, 15kHz, 30kHz, 110kHz &

220kHz with provision for an optional 500Hz Collins mechanical filter, also a substitute 2.5kHz Collins mechanical SSB filter and Collins mechanical 5.5kHz narrow AM filter option is available.

The AR5000A is housed in a stylish custom **solid metal cabinet** and is powered from the supplied external 12V d.c. power unit but may be operated from any regulated supply or battery capable of providing 12-16V @ 1.0 Amps approx. Aerial input is via a high quality N-TYPE connector with a second SO239 connector which is switchable manually or automatically from the front panel. A switchable preamplifier is employed (below 230 MHz) plus a switchable 10dB attenuator, this may be configured as "auto" so that the receiver selects the optimum setting automatically.

Not only is the RF performance outstanding, the microprocessor facilities also point to the forward and innovative thinking which forms the core of the success. There are 1,000 memory channels, 10 scan banks, 20 search banks with **auto-memory store** and a total of **2100 PASS frequencies**, 5 independent VFOs, alpha-lag memory & search banks... TWICE, frequency offset, step adjust and auto-mode tuning and much more.

The 1,000 memory channels (10 banks x 100 channels), 20 search banks (TWICE) are stored by EEPROM so that no external supply, battery or capacitor is required for data retention.

Evolution in Action

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